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(54) Abstract Title

Drilling turbine

(57) A turbine (10) is disclosed which includes a turbine blade housing (14) having an inner facing portion (22) of a first material having a first coefficient of expansion, and a turbine blade body (16) having an outer facing portion (24) of a second coefficient of expansion greater than said first coefficient. In a preferred embodiment, the blade housing (14) comprises a number of steel shroud rings (26) and the turbine blade body (16) comprises a number of stators (32) and rotors (34) of a thermoplastic material. An interference fit between stator blades (38) and the shroud rings (26) is enhanced in use due to the difference in thermal and/or hydrophilic coefficients of expansion of the first and second materials.

